

# FILTRATION MEDIA



## PROACTIVE™ 20 X 50 SUPERCAT™ COCONUT SHELL CARBON

ProActive™ 20 x 50 SuperCat™ Coconut Shell Carbon (P/N IT50003SC) is a dual-function activated carbon. It offers a high activity for the removal of both chloramines and chlorine from water, while, at the same time, it retains the inherent superiority of coconut shell carbons for removing trace organics. Like other coconut carbons, it has a higher hardness, lower dust level, and lower levels of soluble ash than standard coal-based carbons. ProActive™ SuperCat™ Coconut Shell Carbon is Certified to NSF/ANSI Standard 61.

### Specifications

Gas Adsorption Capacity ..... 55% minimum  
 Moisture Content ..... 5% maximum  
 Particle Size ..... 20 x 50 mesh  
 Iodine Number ..... 1250 minimum  
 Ash Content ..... 3% maximum  
 Ball Pan Hardness ..... 98  
 Bulk Density ..... 46 g/cm<sup>3</sup>  
 Packaging ..... 56 lb. (2 cu.ft.) bag

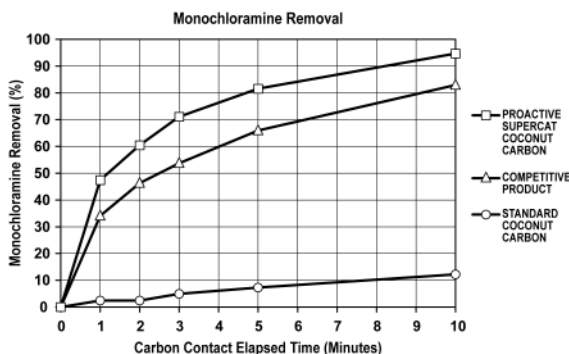
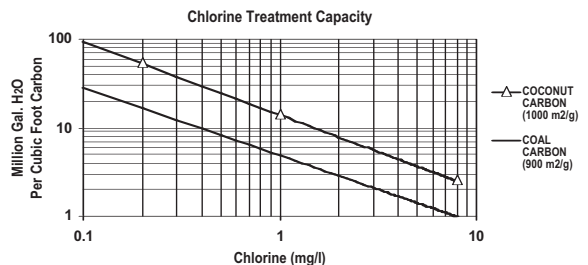
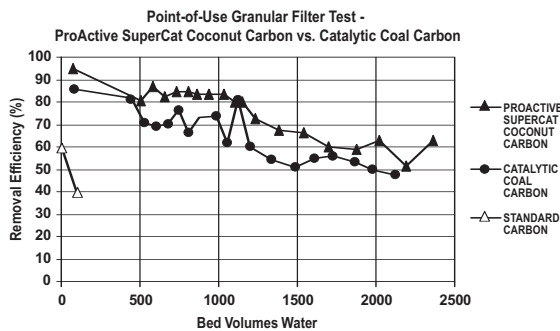
Particle size distribution will be 5% maximum on the top screen and 5% maximum through the bottom screen. If the moisture exceeds 5%, BSC weight adjusts.

### Catalytic Chloramine Removal

Many municipalities now use chloramines instead of chlorine to disinfect water supplies; chloramines can also form after conventional chlorination via reaction with nitrogen-containing organics. Because standard activated carbons do not remove chloramines well, SWT is introducing this surface-modified carbon, designed specifically to catalyze monochloramine (NH<sub>2</sub>Cl) decomposition.

### Trace Organic Capacity

ProActive™ SuperCat™ Coconut Shell Carbon, a highly microporous carbon, also offers superior removal of chloroform, THM, and MTBE when compared to other coconut shell or coal-based carbons.



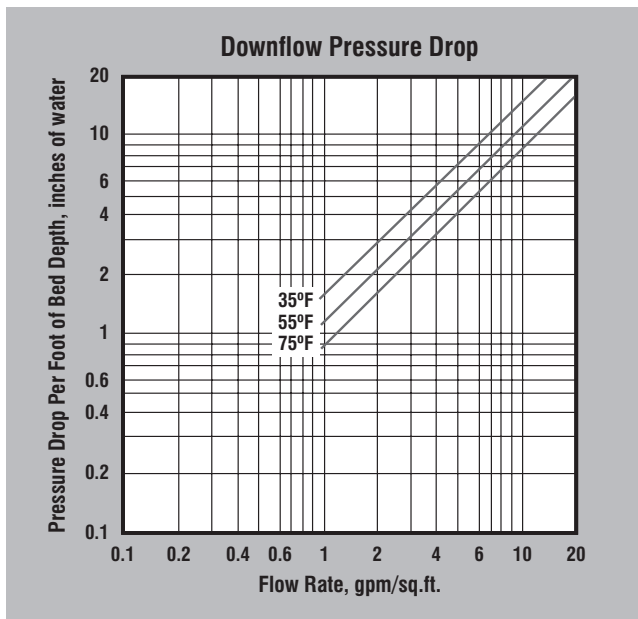
### ProActive™ SuperCat™ Coconut Carbon Performance Comparison

The top left figure shows an accelerated test of ProActive™ SuperCat™ Coconut Carbon and a coal-based catalytic carbon. Standard 2.5 x 9 inch water filter cartridges containing granular carbon were tested at 1 gpm water flow (11 sec. empty bed contact time). At higher empty bed contact times (greater than 2 minutes), ProActive™ SuperCat™ Coconut Carbon reduced monochloramine from 3 ppm to non-detect levels. The bottom left figure shows kinetic tests of the monochloramine decomposition reaction with several different carbons.

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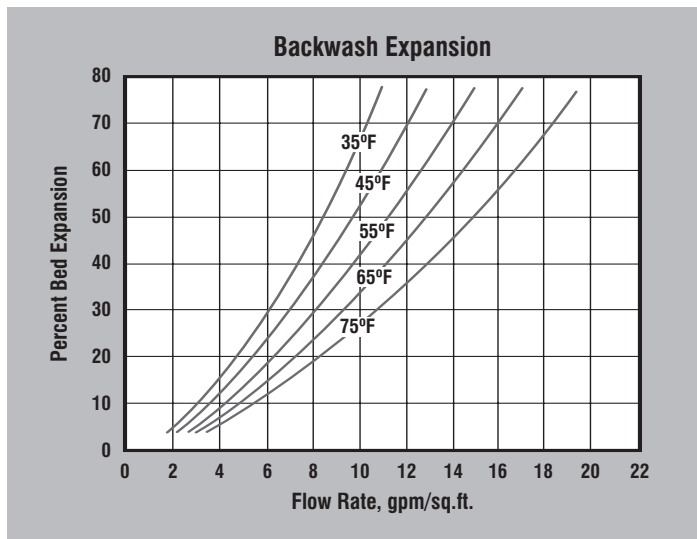
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**PRESSURE DROP** — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

### Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.



**BACKWASH** — After each cycle the carbon bed should be backwashed at a rate that expands the bed 30 to 50 percent. This will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of ProActive™ 20 x 50 SuperCat™ Coconut Shell Carbon.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.